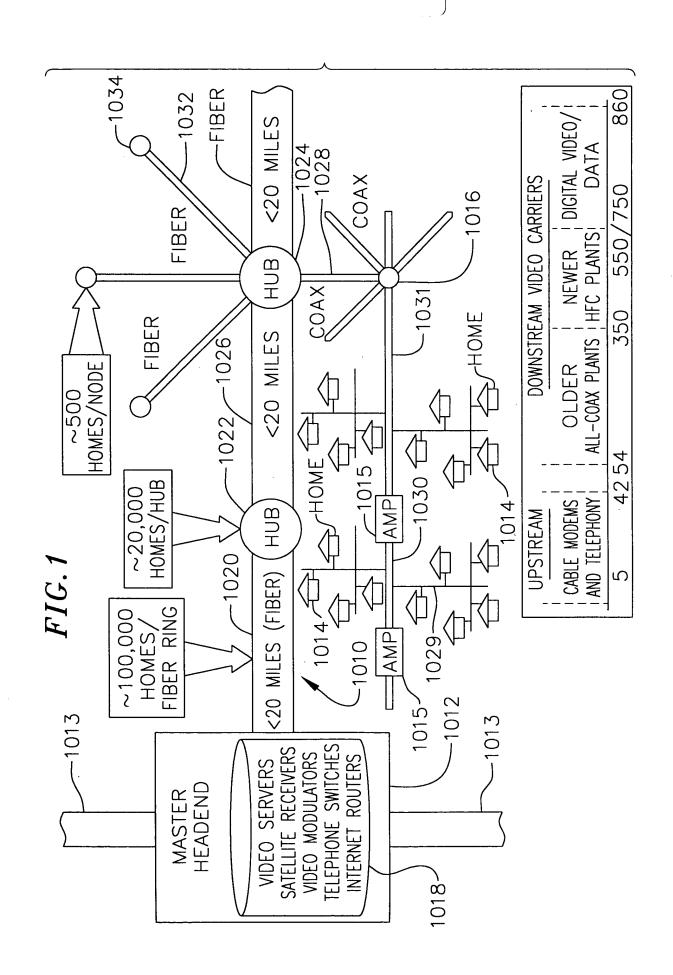
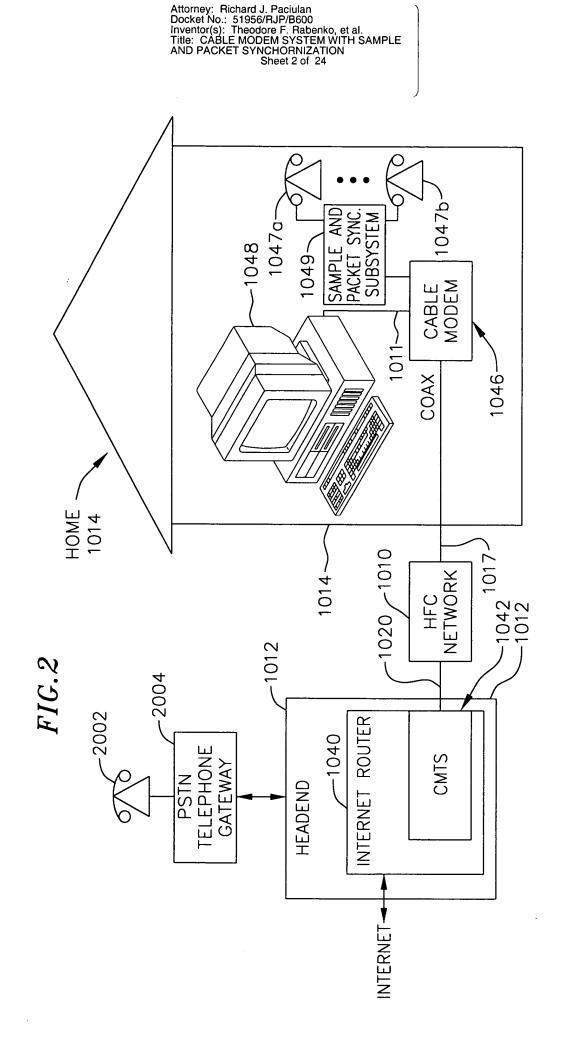
Attorney: Richard J. Paciulan
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Inventor(s): Theodore F. Rabenko, et al.
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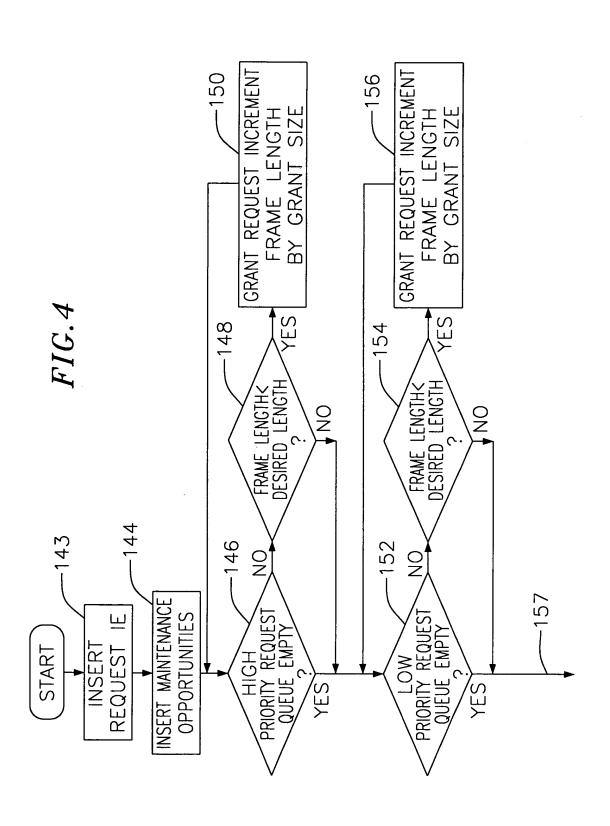


CURRENT MAP

PREVIOUS MAP

TRANSMITTED ON DOWNSTREAM CHANNEL BY THE CMTS CMtx OPPORTUNITY FIG.3116 114--119 REQUEST CONTENTION REGION 112 115 CMtx OPPORTUNITY 90 PDU MAP

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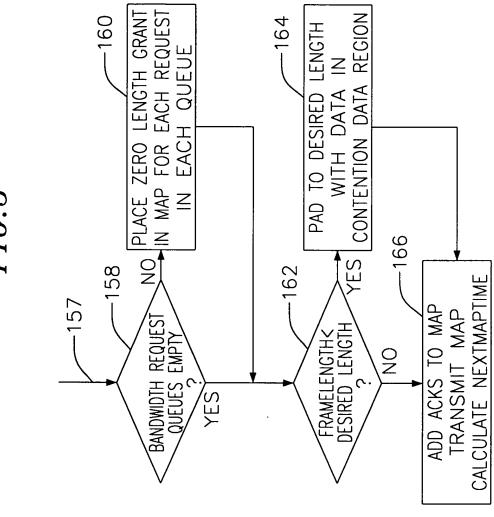
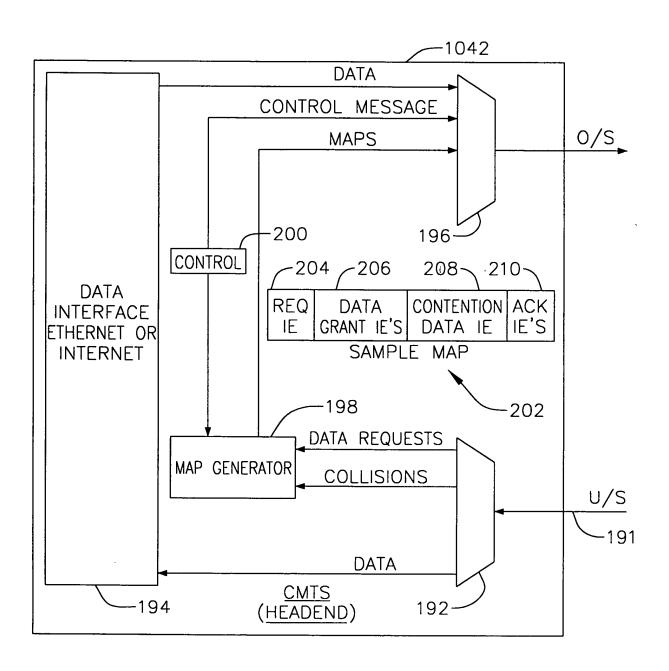


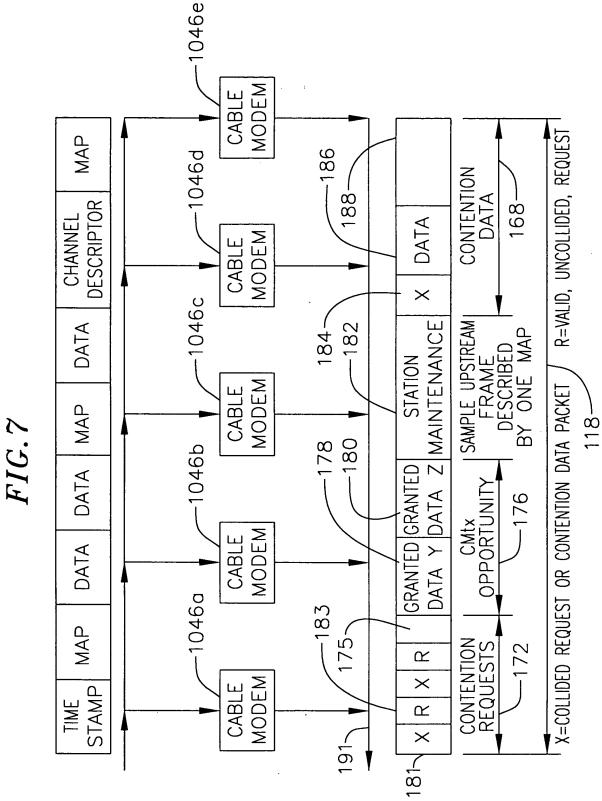
FIG.5

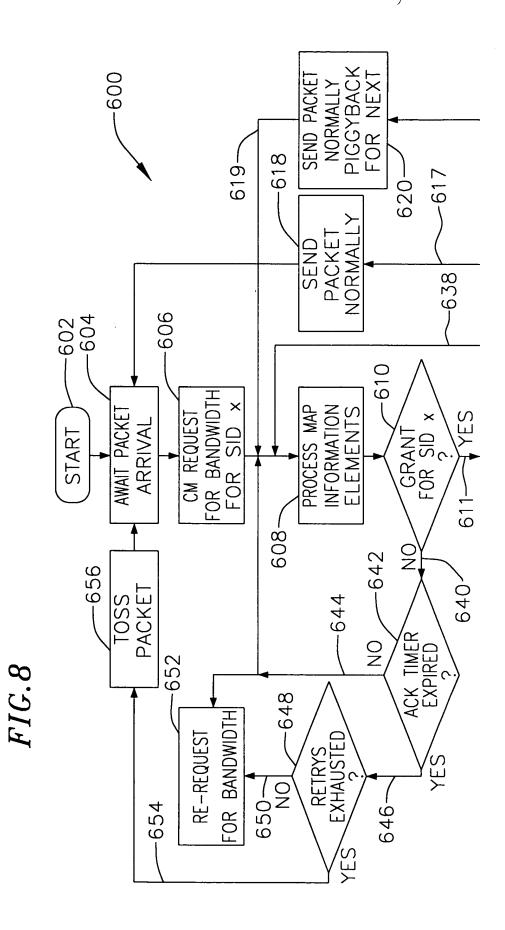
Attorney: Richard J. Paciulan
Docket No.: 51956/RJP/B600
Inventor(s): Theodore F. Rabenko, et al.
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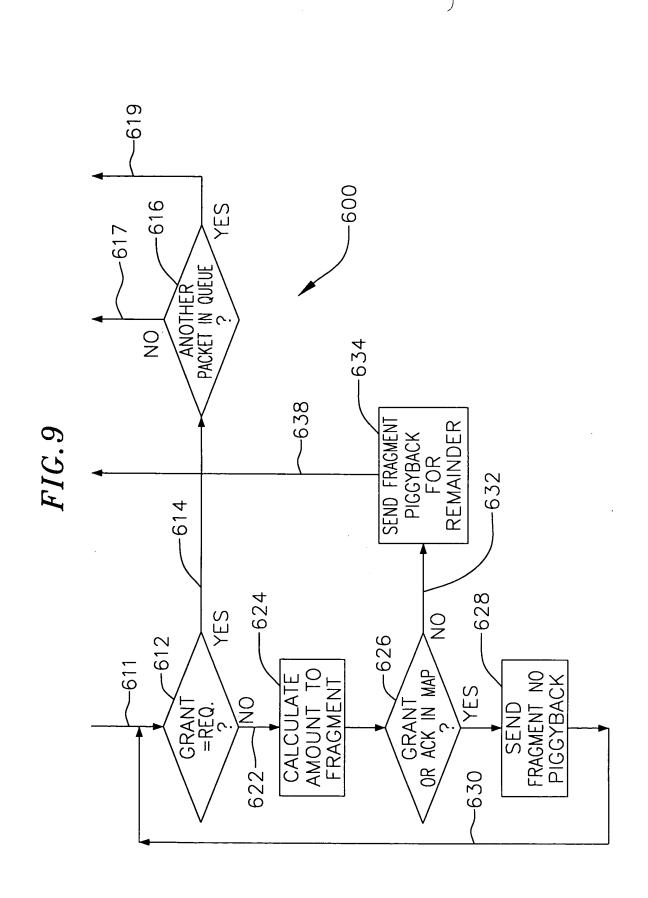
FIG.6



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Attorney: Richard J. Paciulan Docket No.: 51956/RJP/B600 Inventor(s): Theodore F. Rabenko, et al. Title: CABLE MODEM SYSTEM WITH SAMPLE AND PACKET SYNCHORNIZATION Sheet 9 of 24 Attorney: Richard J. Paciulan
Docket No.: 51956/RJP/B600
Inventor(s): Theodore F. Rabenko, et al.
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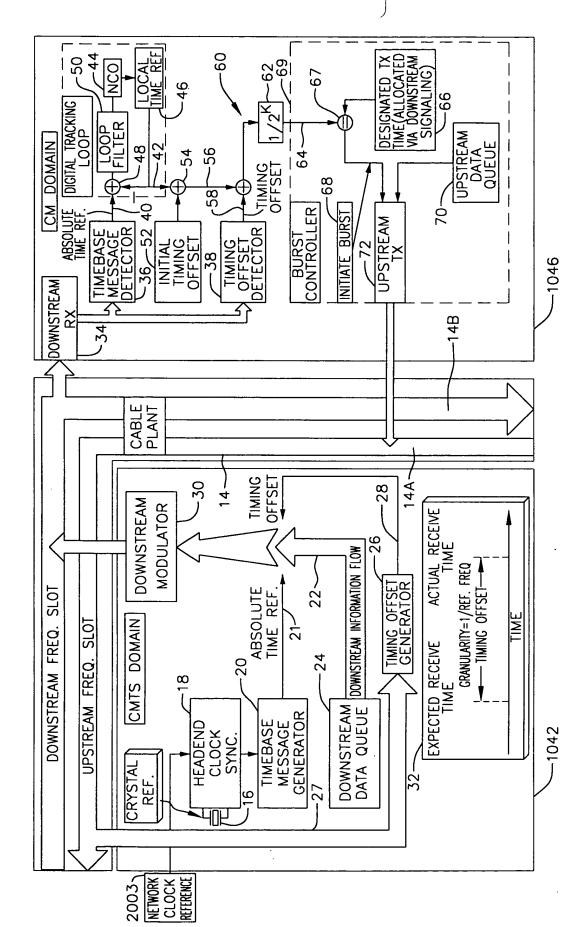


FIG. 10

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Inventor(s): Theodore F. Rabenko, et al.
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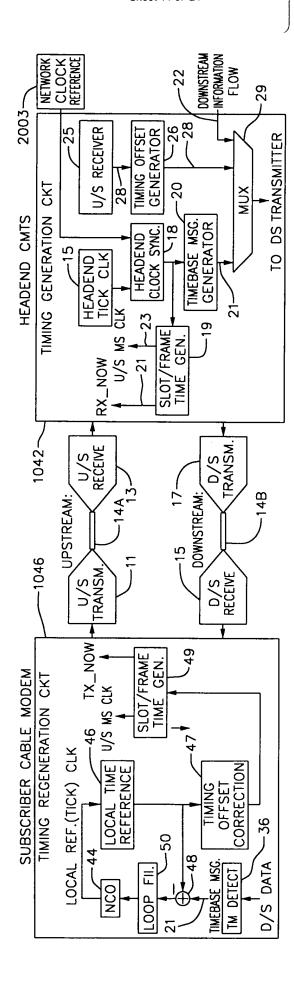
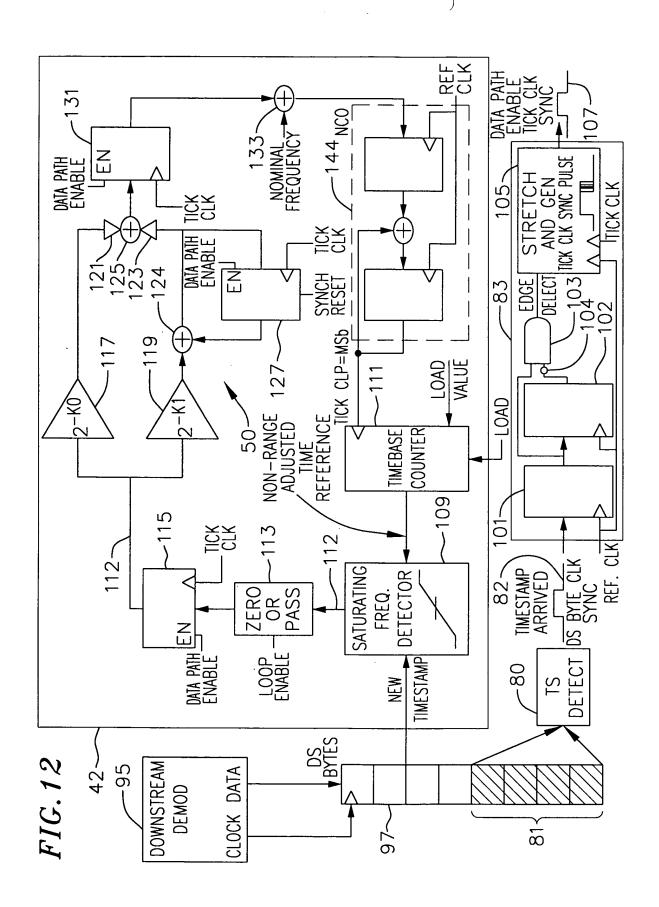


FIG. 11

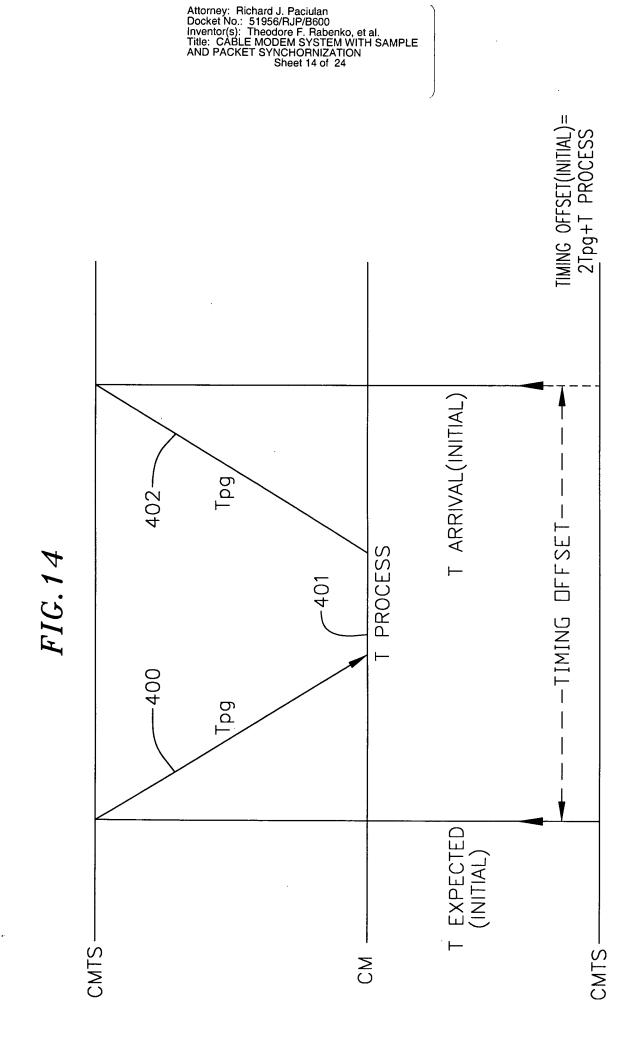
Attorney: Richard J. Paciulan
Docket No.: 51956/RJP/B600
Inventor(s): Theodore F. Rabenko, et al.
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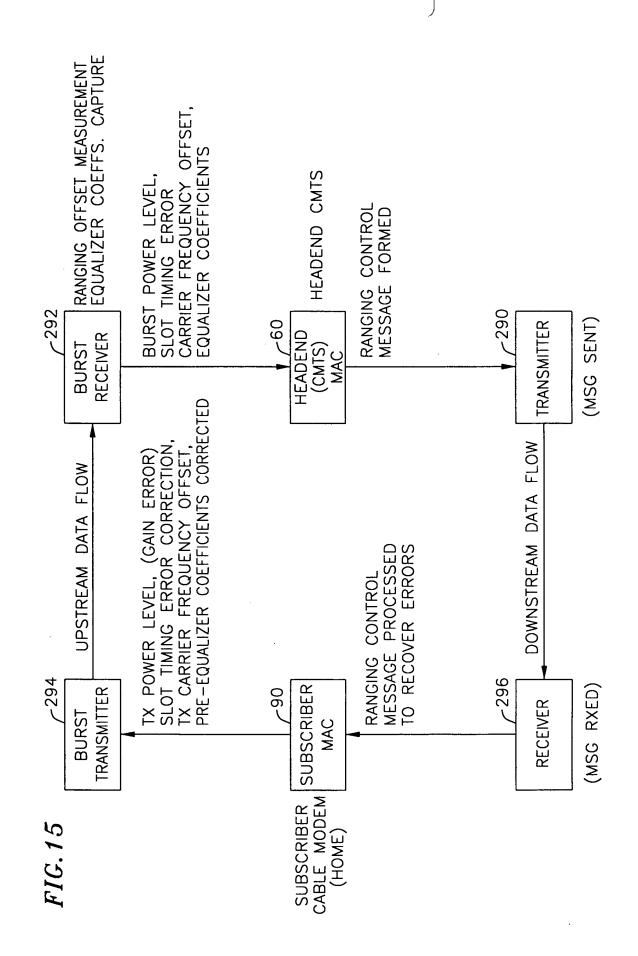
Attorney: Richard J. Paciulan
Docket No.: 51956/RJP/B600
Inventor(s): Theodore F. Rabenko, et al.
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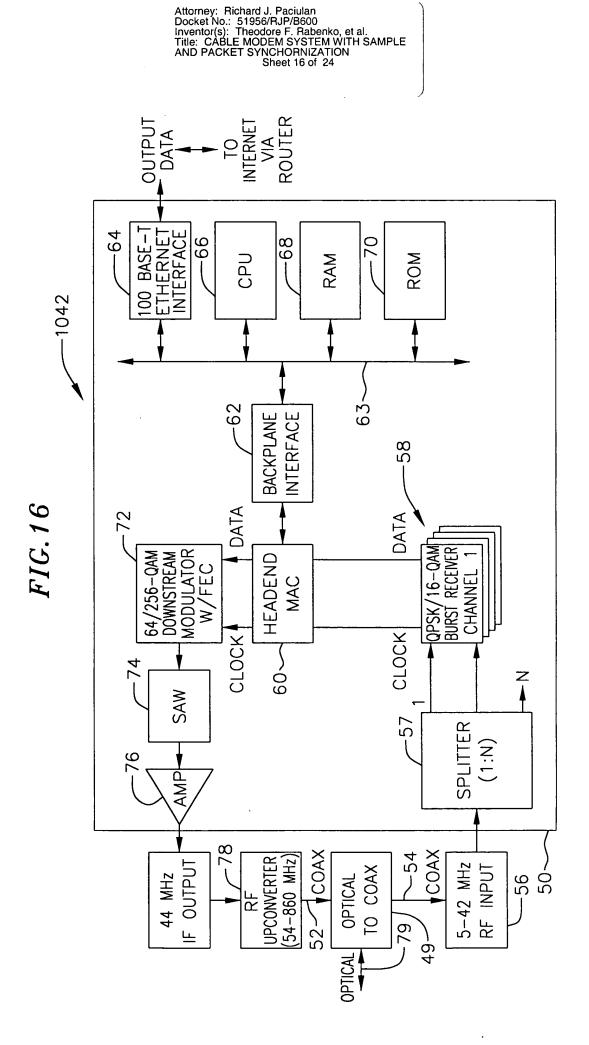
FIG. 13

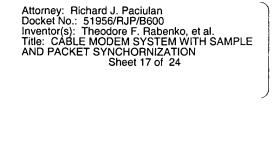
| UPDATE RATE | COARSE COEFFS | FINE COEFFICIENTS |
|--------------|---|---|
| 1kHz(1ms) | -11 K0=2 K1=2 ⁻¹⁵ (BW=50Hz) | K0=2 K1=2 ⁻²⁵ (BW=1Hz) |
| 300Hz(3.3ms) | -12 K0=2 K1=2 ⁻¹⁵ (BW=20Hz) | 0.00000000000000000000000000000000000 |
| 100Hz(10ms) | K0=2 $K1=2$ $BW=10Hz$ | -16 K0=2-22 K1=2-22 (BW=1Hz) |
| 50Hz(20ms) | -14 K0=2 ⁻¹⁷ K1=2 ⁻¹⁷ (BW=5Hz) | 0.00000000000000000000000000000000000 |
| 30Hz(33ms) | $K0=2^{-15}$ $K1=2^{-18}$ $(BW=3Hz)$ | 0.00000000000000000000000000000000000 |
| 10Hz(100ms) | K0=2 $K1=2$ $(BW=1Hz)$ | K0=2 K1=2 ⁻²⁰ (BW=1Hz) |
| 5Hz(200ms) | -18 K0=2 K1=2 ⁻²⁰ (BW=1Hz) | -18 K0=2 K1=2 ⁻ 20 (BW=1Hz) |

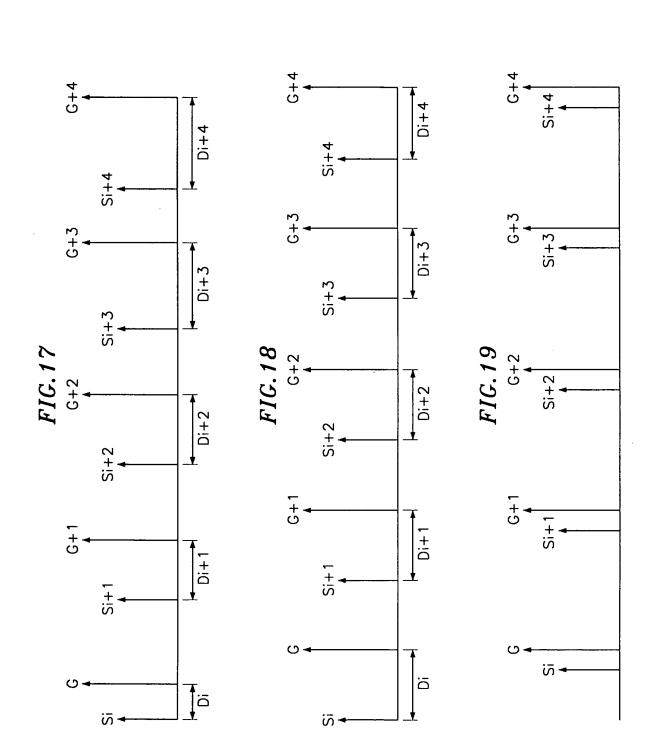


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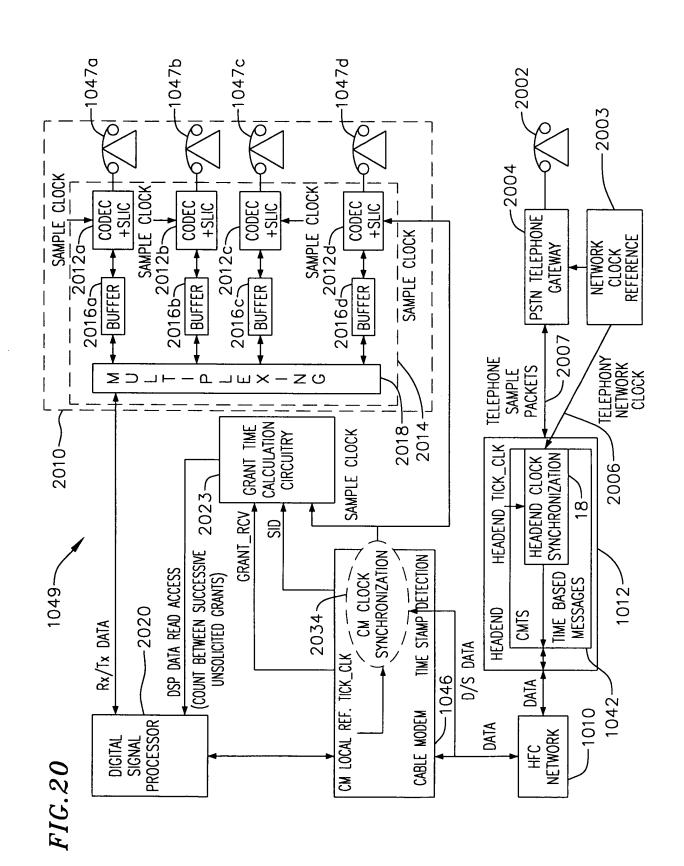








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FIG.21

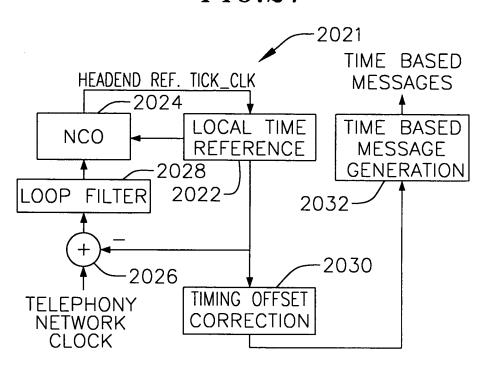
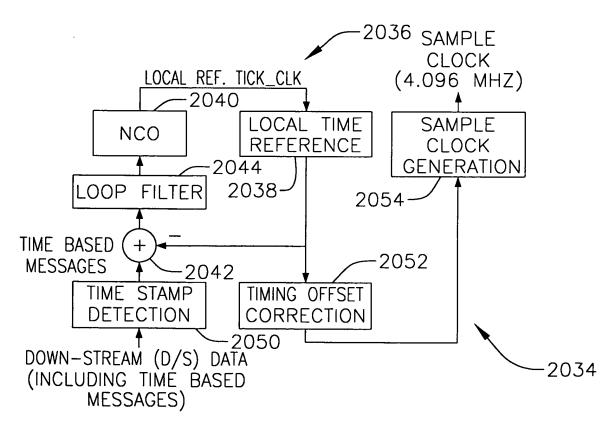
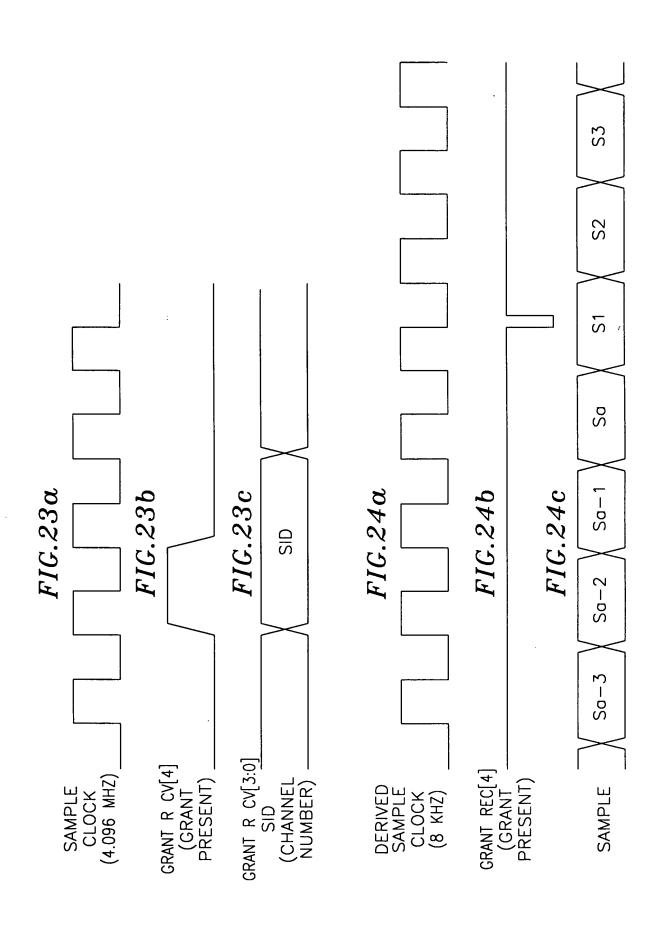


FIG.22



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FIG.25

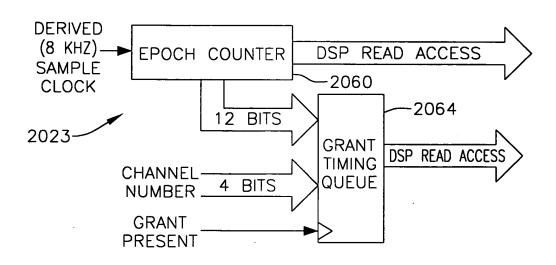
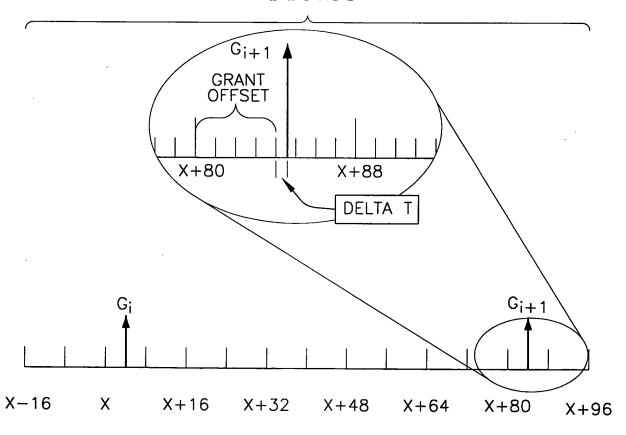
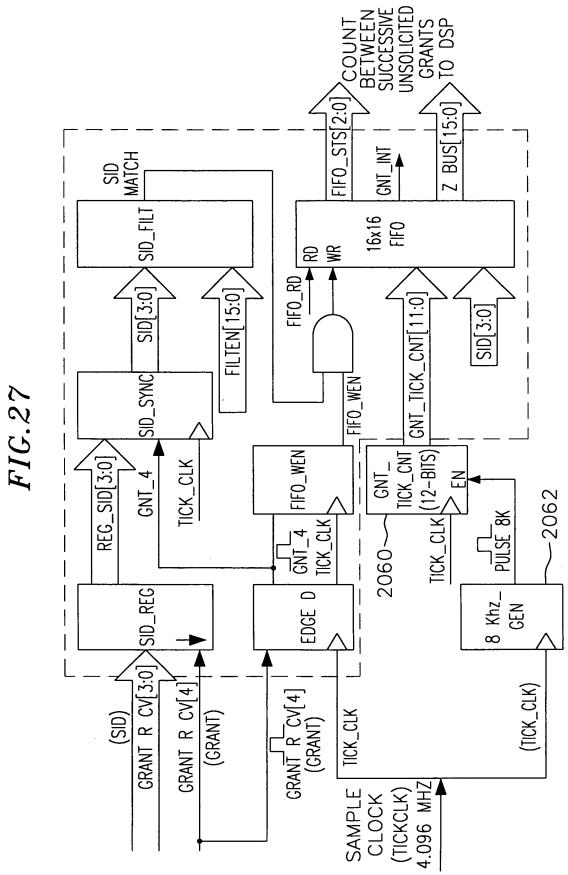


FIG.26



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Title: CABLE MODEM SYSTEM WITH SAMPLE
AND PACKET SYNCHORNIZATION
Sheet 23 of 24 SAMPLE SAMPLE CODEC +SLIC CODEC +SLIC CODEC CODEC +SLIC +SLIC UP-STREAM DATA BUFFER UP-STREAM DATA BUFFER DOWN-STREAM DATA BUFFER UP-STREAM DATA BUFFER CH.1 DATA POINTER CH.4 DATA POINTER .2010 1 ١ CH.4 F.1 CH.4 CH.1 CH.1 U/S DATA CH.1 D/S DATA CH.4 U/S DATA CH.4 D/S DATA 2016d-2016a \geq DSP DATA READ ACCESS TABLE DIGITAL SIGNAL PROCESSOR -2070 2020 2072-≷

FIG.28

.2023

CALCULATION

GRANT

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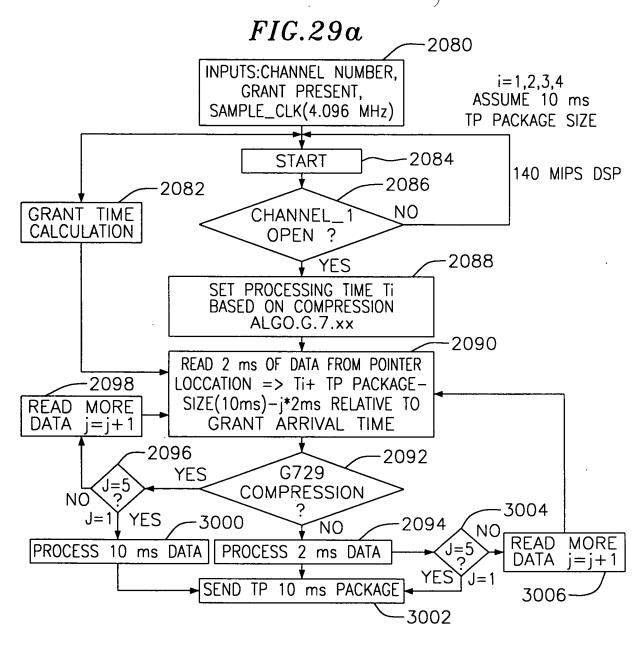


FIG.29b

